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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SWERDLOW, DANIEL	
ART UNIT	**PAPER NUMBER**
2644	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,198	BAILEY, GEORGE R.	
	Examiner	Art Unit	
	Daniel Swerdlow	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,19,20 and 23-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *2-6,9,19,20 and 23-26* is/are allowed.

6)☒ Claim(s) *1,7,8 and 10-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pitsch et al. (US Patent 5,859,906).

3. Regarding Claim 1, Pitsch discloses **applying and disconnecting** an automatic modem (i.e., **an unavoidable load**) to and from a telephone line (i.e., **a communications circuit**) by **gradually** increasing and decreasing the current drawn from the line **without** generating clicks (i.e., **data disruption**) (column 1, lines 47-52).

4. Claim 10 is essentially similar to Claim 1 and is rejected on the same grounds.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 10, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vantill et al. (US Patent 3,708,634) in view of Pitsch.

7. Regarding Claim 1, Vantill discloses a telephone test set (i.e., **an unavoidable load**) that is **applied to and disconnected from** a telephone line (i.e., **a communications circuit**) (column 2, lines 3-33). Therefore Vantill anticipates all elements of Claim 1 except gradually applying or disconnecting the test set. Vantill further discloses the importance of avoiding loading effects such as clicks when the test set is connected (column 1, lines 23-31, 43-53). Pitsch discloses that by **gradually applying and disconnecting** a device to and from a telephone line (i.e., **a communications circuit**) generation of clicks (i.e., **data disruption**) is avoided (column 1, lines 47-52). It would have been obvious to one skilled in the art at the time of the invention to apply gradual connection and disconnection as taught by Pitsch to the test set taught by Vantill for the purpose of further reducing the disruptive clicks.

8. Claim 10 is essentially similar to Claim 1 and is rejected on the same grounds.

9. Regarding Claim 11, Vantill further discloses a test set (i.e., **monitor access**) (column 2, lines 3-33) and Pitsch further discloses gradually increasing (column 3, lines 29-32) and decreasing (column 4, lines 3-8) the current drawn (i.e., **controlling variable resistance**) by a photo-darlington pair (i.e., **variable impedance element**) (Fig. 1, reference PD1).

10. Regarding Claim 14, Pitsch further discloses the **variable resistance element** being a light emitting diode (i.e., **adjustable light source**) (Fig. 1, reference LED1) **in operative proximity to** a photo-darlington pair (i.e., **photoresistor**) (Fig. 1, reference PD1) (column 3, lines 29-32; column 4, lines 3-8).

11. Claims 1, 7 and 10 through 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aponte et al. (US Patent 6,215,856) in view of Pitsch.

12. Regarding Claim 1, Aponte discloses a monitor (i.e., **an unavoidable load**) (Fig. 2, reference 218; column 3, lines 12-26) that is **applied to and disconnected from** telephone lines (i.e., **a communications circuit**) (column 1, lines 31-41). Therefore Aponte anticipates all elements of Claim 1 except gradually applying or disconnecting the test set. Aponte further discloses the importance of avoiding loading effects such as spurious signals, spikes, noise and distortion when the monitor is connected (column 1, lines 35-36). Pitsch discloses that by **gradually applying and disconnecting** a device to and from a telephone line (i.e., **a communications circuit**) generation of clicks (i.e., **data disruption**) is avoided (column 1, lines 47-52). It would have been obvious to one skilled in the art at the time of the invention to apply gradual connection and disconnection as taught by Pitsch to the monitor taught by Aponte for the purpose of further reducing the disruptive effects.

13. Regarding Claim 7, Aponte further discloses **separate** monitoring (i.e., **observation**) of input and output signals (i.e., **each direction of information flow**) (column 3, lines 12-22).

14. Claim 10 is essentially similar to Claim 1 and is rejected on the same grounds.

15. Regarding Claim 11, Aponte further discloses a monitor (i.e., **monitor access**) (Fig. 2, reference 218; column 3, lines 12-26) and Pitsch further discloses gradually increasing (column 3, lines 29-32) and decreasing (column 4, lines 3-8) the current drawn (i.e., **controlling variable resistance**) by a photo-darlington pair (i.e., **variable impedance element**) (Fig. 1, reference PD1).

16. Regarding Claim 12, Aponte further discloses tip and ring lines (i.e., **a wireline data circuit**) (Fig. 3; column 3, lines 47-52) and a fiber terminal (i.e., **a fiber optic data circuit**) (column 3, lines 36-37).

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aponte in view of Pitsch as applied to Claim 1 above, and further in view of Cubbison, Jr. (US Patent 5,504,736).

18. Regarding Claim 8, Aponte further discloses use of the monitor on network elements in general (column 3, lines 28-31) and **telecommunication lines** in particular (column 1, lines 22-24). Therefore, the combination of Aponte and Pitsch makes obvious all elements except the telecommunication lines being a digital subscriber line. Cubbison discloses the importance of monitoring **digital subscriber lines** (column 1, lines 14-20, 30-42) for qualifying and diagnosing these lines. It would have been obvious to one skilled in the art at the time of the invention to use the combination made obvious by Aponte and Pitsch on a digital subscriber line to perform the qualification and diagnosis disclosed as essential by Cubbison.

19. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aponte in view of Pitsch as applied to Claim 12 above, and further in view of admitted prior art.

20. Regarding Claim 13, as shown above apropos of Claim 12, the combination of Aponte and Pitsch makes obvious all elements except a digital subscriber line, a duplex transmission scheme and modem means continuously adaptive to slow transmission media parametric changes. Applicant admits as prior art the SDSL system (i.e., **a digital subscriber line**) with transmission in both directions (i.e., **a duplex transmission scheme**) and **modems that continue to adapt to slow changes transmission characteristics** (Disclosure: page 5, lines 19-20, 26-27). It would have been obvious to one skilled in the art at the time of the invention to

use the combination made obvious by Aponte and Pitsch on an SDSL line admitted as prior art for the purpose of monitoring the line for qualification and diagnosis.

Allowable Subject Matter

21. Claims 2 through 6, 9, 19, 20 and 23 through 26 are allowed.

22. The following is an examiner's statement of reasons for allowance:

23. Regarding Claim 2, in the prior Office action mailed on 29 October 2004, examiner indicated Claim 2 would be allowable if rewritten in independent form including all limitations of the base claim. Applicant has amended Claim 2 in the prescribed manner. As such, Claim 2 is allowable for reasons stated in the prior Office action.

24. Claims 3 through 6, 9 and 23 through 26 are allowable due to dependence from Claim 2.

25. Claims 19 and 20 are allowable for reasons stated in prior Office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

26. Applicant's arguments filed 31 January 2005 have been fully considered but they are not persuasive.

27. On pages 11 and 12 of the response filed on 31 January 2005, applicant alleges that Pitsch fails to anticipate the limitation "without data disruption" in Claim 1. Examiner

respectfully disagrees. Applicant alleges that the disclosure in Pitsch that "[a] subscriber ... may hear a faint noise ... and ... the volume [will] drop by around 6 dB" constitutes a data disruption. Examiner respectfully disagrees. Webster's Ninth New Collegiate Dictionary defines disrupt as "to break apart" or "to throw into disorder". A faint noise and a 6 dB attenuation gradually applied to not constitute a disruption. Applicant alleges that the modem in Pitsch "usurps the subscriber telephone line" and thus disrupts data. Examiner respectfully disagrees. The modem in Pitsch only uses the subscriber line if it is not already in use and therefore does not cause disruption of the existing usage of the line that corresponds to the data claimed.

28. On page 12 of the response, applicant makes similar arguments with respect to Claim 10. These arguments are unpersuasive for the reasons stated above.

29. On page 12 of the response, applicant alleges that the combination Pitsch and Vantill disclose or suggest the limitation "without data disruption" in Claim 1. Examiner respectfully disagrees. As shown above, the limitation is taught by Pitsch.

30. Spanning pages 12 and 13 of the response applicant alleges there is no motivation to combine Pitsch and Vantill. Examiner respectfully disagrees. As stated above under *Claim Rejections 35 USC §103*, Vantill discloses the importance of avoiding loading effects such as clicks when the test set is connected and Pitsch discloses that by gradually applying and disconnecting a device to and from a telephone line generation of clicks is avoided. As such, there is motivation to combine.

31. On page 13 of the response, applicant makes similar arguments with respect to Claim 10. These arguments are unpersuasive for the reasons stated above.

32. On page 13 of the response, applicant's arguments regarding Claims 9, 11 and 14 are limited to their dependence from Claims 1 or 10. These arguments are unpersuasive for the reasons stated above.

33. On page 15 of the response, applicant makes similar arguments with respect to the rejections of Claims 1, 7 and 10 through 12 for obviousness in view of Aponte and Pitsch by alleging that Pitsch fails to meet the limitation "without data disruption". These arguments are unpersuasive for the reasons stated above.

34. On page 15 of the response, applicant alleges that the combination of Aponte and Pitsch fails to make obvious Claims 1, 7 and 10 through 12 because Aponte fails to meet the limitation "without data disruption". Examiner respectfully disagrees. As shown above, this limitation is met by Pitsch.

35. On page 16 of the response applicant alleges there is no motivation to combine Aponte and Pitsch. Examiner respectfully disagrees. As stated above under *Claim Rejections 35 USC §103*, Aponte discloses the importance of avoiding loading effects such as spurious signals, spikes, noise and distortion when a monitor is connected and Pitsch discloses that by gradually applying and disconnecting a device to and from a telephone line, generation of clicks is avoided. As such, there is motivation to combine.

36. On page 16 of the response, applicant makes similar arguments with respect to Claim 10. These arguments are unpersuasive for the reasons stated above.

37. On page 17 of the response, applicant makes arguments regarding Claims 7, 8, 11 and 12 that are limited to the dependence of these claims from their respective base claims. These arguments are unpersuasive for the reasons stated above apropos of those base claims.

38. On page 17 of the response, applicant alleges that the combination of Pitsch, Aponte and Cubbison fails to make obvious Claim 8 because Cubbison fails to meet the limitation "without data disruption". Examiner respectfully disagrees. As shown above, this limitation is met by Pitsch.

39. On page 17 of the response applicant alleges there is no motivation to combine Pitsch, Aponte and Cubbison. Examiner respectfully disagrees. As stated above under *Claim Rejections 35 USC §103*, Cubbison discloses the importance of monitoring digital subscriber lines for qualifying and diagnosing these lines. It would have been obvious to one skilled in the art at the time of the invention to use the combination made obvious by Aponte and Pitsch on a digital subscriber line to perform the qualification and diagnosis disclosed as essential by Cubbison.

40. On page 18 of the response, applicant's arguments regarding Claim 13 are limited to its dependence from Claim 10. These arguments are unpersuasive for the reasons stated above.

41. On page 18 of the response applicant alleges there is no motivation to combine Pitsch, Aponte and admitted prior art. Examiner respectfully disagrees. It would have been obvious to one skilled in the art at the time of the invention to use the combination made obvious by Aponte and Pitsch on an SDSL line admitted as prior art for the purpose of monitoring the line for qualification and diagnosis.

Conclusion

42. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 703-305-4088. The examiner can normally be reached on Monday through Friday between 8:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ds
21 March 2005

SINH TRAN
SUPERVISORY PATENT EXAMINER